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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
ROSARIO, DENNIS	
ART UNIT	**PAPER NUMBER**
2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/982,008	YAMADA ET AL.	
	Examiner	Art Unit	
	Dennis Rosario	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *amt. 17 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6,8-12,15-20 and 23* is/are rejected.

7)☒ Claim(s) *2-5,7,13,14,21 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. The amendment was received on December 17, 2004. Claims 1-23 are pending.

Response to Arguments

2. Applicant's arguments, see amendment page 9, line 17 to page 10, line 7, filed 12/17/2004, with respect to claim 1 have been fully considered and are persuasive. The rejection of claim 1 has been withdrawn. Thus, the rejection of the dependent claims has been withdrawn.

Applicant's arguments, see amendment page 9,line 17 to page 10,line 7, filed 12/17/2004, with respect to the rejection(s)of claim 1 under Yamada et al. (US Patent 5,831,688 A) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shimizu et al. (US Patent 5,991,452 A).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7,16 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7, line 3 has the phrase "having a smaller number of DCT coefficients" where "having a smaller number of DCT coefficients" with respect to what? With respect to line 4:"a picture having a larger number of DCT coefficients"? Or with respect to other pictures? Currently "having a smaller number of DCT coefficients" needs to be clarified.

Claim 7, line 4: has the word "and" which makes claim 7 detect two pictures in order to detect an intra frame coding picture? Or detect one picture in order to detect an intra frame coding picture? If one picture is detected in order to detect an intra frame coding picture, then the word "and" of line 4 ought to be amended to "or" which corresponds to "or" on page 15, line 6 of the specification.

Claim 7, line 4 has the phrase "having a larger number of DCT coefficients" which has a similar problem of claim 7, line 3 described above.

Claims 16 and 23 are rejected for the same reasons as claim 7.

A proposed amendment based on the rejection of claim 7 is:

The method according to claim 15, further comprising:

a) detecting an intra-frame coding picture by determining whether a picture having a smaller number **with respect to other pictures** of transform coefficients **and** [having] absolute values larger than threshold values **or** a picture having a larger number of transform coefficients **with respect to other pictures and** [having] absolute values smaller than threshold values.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,6,8,9 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al. (US Patent 5,991,452 A).

Regarding claim 1, Shimizu et al. discloses an apparatus for re-coding an image signal, which conducts re-coding processing using a decoded image signal subjected to coding processing as an input image signal, comprising:

a) a DCT unit (Fig. 5,num. 111: ORTHOGONAL TRANSFORMATION UNIT) for subjecting the input image signal to a discrete cosine transform (DCT) (Fig. 5,num. 111: ORTHOGONAL TRANSFORMATION UNIT subjects the input image signal or IMAGE DATA of fig. 5 to a "DCT" as mentioned in col. 5, lines 2345.);

b) a DCT coefficient counter for counting (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT.) a feature amount (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT counts a feature amount via "COUNT" in col. 11, line 7 which represents a "value" in col. 11, line 4.) on a picture basis (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT counts a feature amount via "COUNT" in col. 11, line 7 which represents a "value" in col. 11, line 4 based on a picture basis or IMAGE DATA of fig. 5.) using a DCT coefficient output from said DCT unit (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT counts a feature amount via "COUNT" in col. 11, line 7 which represents a "value" in col. 11, line 4 based on a picture basis or IMAGE DATA of fig. 5 using a DCT coefficient output from said DCT unit as shown in fig. 5 via a double-headed arrow.) ;

c) a picture type for detecting a picture type detector (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT "determines that the image data is complicated" in col. 11, lines 17-19 and "determines whether or not there is a next image...(col. 11, lines 22-24)." Hence, fig. 5,num. 113 detects or determines two types of images: complicated images and a next image.) in coding processing in a previous stage (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT "determines that the image data is complicated" in col. 11, lines 17-19 and "determines whether or not there is a next image...(col. 11, lines 22-24)" in coding processing shown in fig. 5, num. 110 and 111 which are a previous stage relative to fig. 5, num. 113 where numerals 110 and 111 are used in a coding processing to generate CODE DATA as shown in fig. 5.), using the feature amount (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT "determines that the image data is complicated" in col. 11, lines 17-19 and "determines whether or not there is a next image...(col. 11, lines 22-24)" in coding processing shown in fig. 5, num. 110 and 111 which are a previous stage relative to fig. 5, num. 113 where numerals 110 and 111 are used in a coding processing to generate CODE DATA as shown in fig. 5, using the feature amount, "COUNT" in col. 11, lines 7 and 16.) output from said DCT coefficient counter;

d) a coding control portion (Fig. 5, numerals 112 and 114 are a coding control portion.) for determining coding parameters (Fig. 5, num. 112 and 114 are a coding control portion for determining coding parameters or CODE DATA in fig. 5) in re-coding (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA in fig. 5 in re-coding or "re-coding" in col. 7, line 41and shown in fig. 3B, num. 44. Note that the CODE DATA of fig. 5 is represented in fig 3B as an output arrow of fig. 3B,num. 3) in accordance with detection results (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA of fig. 5 in re-coding or "re-coding" in col. 7, line 41and shown in fig. 3B, num. 44 in accordance with detection results as shown by the output arrow of detector 113 of fig. 5.) of said picture type detector (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA of fig. 5 in re-coding or "re-coding" in col. 7, line 41and shown in fig. 3B, num. 44 in accordance with detection results as shown by the output arrow of detector 113 of fig. 5 of said picture type detector 113.); and

e) a coding portion for conducting re-coding processing (Fig. 3B,num. 44 performs "re-coding" in col. 7, line 41.), using the coding parameters (Fig. 3B,num. 44 performs "re-coding" in col. 7, line 41 using the coding parameters CODE DATA of fig. 5 and shown in fig. 3B as an output arrow of fig. 3B,num. 3 via numerals 42 and 43.) determined by said coding control portion.

Regarding claim 6, Shimizu et al. discloses the apparatus for re-coding an image signal according to claim 1, wherein

a) said DCT coefficient counter counts (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT.), as a feature amount (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT counts a feature amount via "COUNT" in col. 11, line 7 which represents a "value" in col. 11, line 4.), the number of DCT coefficients whose absolute values are larger or smaller than previously set threshold values (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT counts a feature amount via "COUNT" in col. 11, line 7, which represents a "value" in col. 11, line 4, the number of DCT coefficients whose "absolute value[s]" in col. 11, line 4 are "larger" in col. 11, line 4 or smaller than previously set "threshold value[s]" in col. 11, line 5.), and

b) said picture type detector detects a picture type in accordance with the obtained number (Fig. 5, num. 113: COEFFICIENT COUNTING UNIT "determines that the image data is complicated" in col. 11, lines 17-19 and "determines whether or not there is a next image...(col. 11, lines 22-24)", using the feature amount, "COUNT" in col. 11, lines 7 and 16.).

Regarding claim 8, Shimizu et al. discloses the apparatus for re-coding an image signal according to claim 1, wherein:

a) said coding control portion determines coding parameters using the picture type detected by the picture type detector (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA of fig. 5 in accordance with detection results as shown by the output arrow of detector 113 of fig. 5.).

Regarding claim 9, Shimizu et al. discloses the apparatus for re-coding an image signal according to claim 1, wherein:

a) said coding control portion determines coding parameters (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA of fig. 5.), using an intended coding amount (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA of fig. 5 using an intended coding amount as shown in fig. 1 which shows an intended amount for coding.) set in accordance with the picture type (Fig. 5, numerals 112 and 114 are a coding control portion for determining coding parameters or CODE DATA of fig. 5 using an intended coding amount as shown in fig. 1 which shows an intended amount for coding set in accordance with determining the picture type using fig. 5,num. 113, which detects or determines two types of images: complicated images and a next image.) detected by the picture type detector.

Claim 18 is rejected the same as claim 9. Thus, argument similar to that presented above for claim 9 is equally applicable to claim 18.

7. Claims 10-12,15,17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (US Patent 5,831,688 A).

Regarding claim 10, Yamada et al. discloses a method for recoding a previously encoded image signal using a decoded image signal as input, comprising:

a) transforming (Fig. 1A, num. 3:TRANSFORMER) the decoded image signal (Fig. 1A, num. 3:TRANSFORMER transforms a decoded image signal from fig. 1B,num. 105a which is an output signal fig. 1B,num. 11: VARIABLE LENGTH DECODER.);

b) counting features (Fig. 1A, num. 4: QUANTIZER counts a "value" in col. 7, line 28 or features from fig. 1B,num. 12: INVERSER QUANTIZER and mentioned in col. 7, lines 24-28.) within the transformed decoded image (Fig. 1A, num. 4: QUANTIZER counts a "value" in col. 7, line 28 or features from fig. 1B,num. 12: INVERSER QUANTIZER and mentioned in col. 7, lines 24-28 within the transformed via fig. 1A, num. 3, decoded, via fig. 1B,num. 11, image. Note that the transformed decoded image is two signals, but the two signals are transformed for one and decoded for the other signal, hence the claimed transformed decoded image.) on a picture basis;

c) detecting a picture type (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR "...makes a determination as to which... picture...107a [of fig.1A or 1B] is...(col. 5, lines 48-53).") of the encoded image signal (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR "...makes a determination as to which... picture...107a [of fig.1A or 1B] is..." where 107a is an encoded image signal that will be decoded via fig. 1B,num. 11: VARAIBLE LENGTH DECODER.) associated with the previous encoding (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR "...makes a determination as to which... picture...107a [of fig.1A or 1B] is..." where 107a is an encoded image signal that will be decoded via fig. 1B,num. 11: VARAIBLE LENGTH DECODER associated with a previous encoding shown in fig. 1A that generates signal 107 which is represented as 107a in fig. 1B.);

d) determining parameters (Fig. 1A, numerals 107a,106,105 and 113 are parameters that were determined using fig. 1B,num. 11, fig. 1A,num. 4 and fig. 1A, num. 10, respectively.) for re-coding (Fig. 1A, numerals 107a,106,105 and 113 are parameters that were determined using fig. 1B,num. 11, fig. 1A,num. 4 and fig. 1A, num. 10, respectively, for re-coding using fig. 1A,num. 5: VARIABLE LENGTH CODER.) based upon the detecting (Fig. 1A, numerals 107a,106,105 and 113 are parameters that were determined using fig. 1B,num. 11, fig. 1A,num. 4 and fig. 1A, num. 10, respectively, for re-coding using fig. 1A,num. 5: VARIABLE LENGTH CODER based upon the detecting using fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR "...makes a determination as to which... picture...107a [of fig.1A or 1B] is...(col. 5, lines 48-53)." and generating the determined parameter 113 of fig. 1A.); and

e) recoding (Fig. 1A,num. 5:VARIABLE LENGTH CODER recodes with respect to the coded signal 107a of fig.1B.) the decoded image signal (Fig. 1A,num. 5:VARIABLE LENGTH CODER recodes with respect to the coded signal 107a of fig.1B which is decoded in fig. 1B,num 11: VARIABLE LENGTH DECODER.) based upon the determining (Fig. 1A,num. 5:VARIABLE LENGTH CODER recodes with respect to the coded signal 107a of fig.1B, which is decoded in fig. 1B,num 11: VARIABLE LENGTH DECODER, based upon the determining of parameters of fig. 1A, numerals 107a,106,105 and 113 are parameters that were determined using fig. 1B, num. 11, fig. 1A,num. 4 and fig. 1A, num. 10, respectively.).

Regarding claim 11, Yamada et al. discloses the method according to claim 10, further comprising:

a) detecting at least two of three kinds of picture types of an intra-frame picture, a forward inter-frame predictive coding picture, and a bi-directional inter-frame predictive coding picture (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR "...makes a determination as to which of I or P or B... picture...107a [of fig.1A or 1B] is...(col. 5, lines 48-53).").

Regarding claim 17, Yamada et al. discloses the method according to claim 10, further comprising:

a) determining coding parameters using the picture type (Fig. 1A, numerals 107a,106,105 and 113 are parameters that were determined using fig. 1B,num. 11, fig. 1A,num. 4 and fig. 1A, num. 10, respectively, for re-coding using fig. 1A,num. 5: VARIABLE LENGTH CODER based upon the detecting using fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR "...makes a determination as to which... picture...107a [of fig.1A or 1B] is...(col. 5, lines 48-53)." and generating the determined parameter 113 of fig. 1A for recoding.).

Regarding claim 19, Yamada et al. discloses the method according to claim 10, wherein the transforming further comprises a DCT in col. 1, line 49.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 12,15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (US Patent 5,831,688 A) in view of Shimizu et al. (US Patent 5,991,452 A).

Regarding claim 12, Yamada et al. teaches the method according to claim 10, further comprising:

a) counting a sum of absolute values (Col. 7, lines 24-28 implicitly describe counting a number of "transform coefficients **104**a" having "a value" in col. 7, line 28.) over a region of transformed image coefficients (Col. 7, lines 24-28 implicitly describe counting a number of "transform coefficients **104**a" having "a value" in col. 7, line 28 over a region of transform coefficients as shown in fig. 2.); and

b) detecting a picture type (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR determines a picture type or determines "as to which [type] of ...picture...**107**a is...(col. 5, lines 51-53).") in accordance with variations with time (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR determines a picture type or determines "as to which [type] of ...picture...**107**a is...(col. 5, lines 51-53)" in accordance with variations with time as shown in fig. 5 where a series of frames are shown that depict time.) of the sum of absolute values (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR determines a picture type or determines "as to which [type] of ...picture...**107**a is...(col. 5, lines 51-53)" in accordance with variations with time, as shown in fig. 5 where a series of frames are shown that depict time, and based on the counting a number of "transform coefficients **104**a" having "a value" in col. 7, line 28.).

Regarding claim 15, Yamada et al. teaches the method of claim 10 further comprising:

a) counting a number of transformed coefficients (Col. 7, lines 24-28 implicitly describe counting a number of "transform coefficients **104**a.") having absolute values (Col. 7, lines 24-28 implicitly describe counting a number of "transform coefficients **104**a" having "a value" in col. 7, line 28.) which are one of larger (Col. 7, lines 24-28 implicitly describe counting a number of "transform coefficients **104**a." having "a value" in col. 7, line 28 that "exceeds a value" in col. 7, line 28 or larger than a value.) and smaller than previously set threshold values (Col. 7, lines 24-28 implicitly describe counting a number of "transform coefficients **104**a." having "a value" in col. 7, line 28 that "exceeds a value" in col. 7, line 28 or larger than a value that is "prespecified" in col. 7, line 28.); and

b) detecting a picture type (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR determines a picture type or determines "as to which [type] of ...picture...**107**a is...(col. 5, lines 51-53).") in accordance with the number (Fig. 1A,num. 10: MOTION COMPENSATION PREDICTOR determines a picture type or determines "as to which [type] of ...picture...**107**a is...(col. 5, lines 51-53)" in accordance via a data path from numerals 4,6,7,8 and 9 of fig. 1A where numeral 4 counts the number of "transform coefficients **104**a" having "a value" in col. 7, line 28 for detecting in fig. 1A,num.10.).

Yamada et al. does not teach the limitation of absolute values, but Yamada does suggest using "a value" in col. 7, line 28 for counting which could be any value used for counting.

Shimizu et al. teaches the limitation of using a value for counting as suggested by Yamada et al. of:

a) counting a number of transformed coefficients (Fig. 5,num. 113: COEFFICIENT COUNTING UNIT) having absolute values (Fig. 5,num. 113: COEFFICIENT COUNTING UNIT as shown by absolute value operators in fig. 4, label:"ST6".) which are one of larger and smaller than previously set threshold values (Fig. 5,num. 113: COEFFICIENT COUNTING UNIT as shown by absolute value operators in fig. 4, label:"ST6" which is smaller than a previously set threshold values "Q/2" as shown in fig. 4, label:"ST6".).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Yamada et al. teaching of counting with a value with Shimizu et al.'s teaching of counting with an absolute value, because Shimizu et al.'s absolute value is used to compress images via a JPEG format as mentioned in col. 1, lines 25-52, thus reducing the amount of data. Note that col. 1, lines 48-52 corresponds to the absolute value that is used in the JPEG format for compression.

Regarding claim 20, the combination of Yamada et al. teaches the method according to claim 12, wherein:

a) the transformed image coefficients (Col. 7, lines 24-28 describes "transform coefficients **104**a.") are DCT coefficients (Col. 7, lines 24-28 describes "transform coefficients **104**a" that are DCT coefficients in col. 1, line 48.); and further wherein:

b) the region (Fig. 2 is a region.) is a frequency region (Fig. 2 is a region of "low fre-quency zone" in col. 7, lines 41,42).

Allowable Subject Matter

10. Claims 2-5,13,14,21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

Claim 2 is allowable over the prior art, because the prior art does not disclose or suggest the limitation of claim 2. The closest prior art, Yamada et al. (US Patent 5,831,688), teaches the limitation of claim 2, but not within the environment of claim of claim 1. To combine references would not result in a reasonable expectation of success.

The benefit of claim 2 specifically detects pictures.

Claim 3 is allowable over the prior art, because the prior art does not disclose or suggest the limitation of a picture type detector detects a picture type in accordance with variations with time of the sum of absolute values. The closest prior art Shimizu et al. (US Patent 5,991,452 A) teaches the limitation of a picture type detector that detects a picture type in accordance with the sum of absolute values and does not take time into account. Thus, the dependent claims 4 and 5 are allowable.

The benefit of claim 3 detects a picture type with smaller processing amounts compared with that in a conventional re-coding.

Claims 4 and 5 are allowable for depending on allowable claim 3.

Claim 7 is allowable based on the proposed amendment, because the prior art, Shimizu et al. (US Patent 5,991,452 A), does not suggest detecting an intra-frame of claim 7.

The benefit of claim 7 is the same as claim 2.

Claim 13 is allowable over the prior art, because the prior art does not disclose or teach the limitation of claim 13. The closest prior art Hamano teaches the limitation of claim 13 in col. 9, lines 22-30. A combination with the prior art, Yamada et al. and Shimizu et al., would not be reasonable because the prior art does not suggest detecting an intra-frame coding picture by determining a sum of values, especially within the environment of the parent claim 1. Both references, Yamada et al. and Shimizu et al., respectively teach intra-frame coding and a sum of values individually and not together; therefore a reasonable combination would not be likely with the Hamano reference. Hence, dependent claim 21 is allowable.

The benefit of claim 13 is the same as claim 2.

Claim 14 is allowable for the same reasons as claim 13. Hence, dependent claim 22 is allowable.

The benefit of claim 14 is the same as claim 2.

Claim 16 is allowable based on the proposed amendment, because the prior art does not suggest or teach the limitation of a picture having a smaller number of transform coefficients **with respect to other pictures and** [having] absolute values larger than threshold values. Thus, dependent claim 23 is allowable.

The benefit of claim 16 is the same as claim 2.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario whose telephone number is (571) 272-7397. The examiner can normally be reached on 6-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571)272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DR

Dennis Rosario
Unit 2621

BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600